

# Comparisons of Job Characteristics

**Focus Occupation:** [Architectural and Engineering Managers \(11-9041\)](#)

**Associated Occupation:** [Industrial Engineering Technicians \(17-3026\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 76

**Focus Occupation:** Architectural and Engineering Managers (11-9041)

**Associated Occupation:** Industrial Engineering Technicians (17-3026)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Production and Processing	6.0	18.0	10.7	<< Extensive education and/or training may be required
Engineering and Technology	5.7	16.7	23.2	>> Current knowledge level is likely more than sufficient
Mathematics	9.2	15.6	17.4	> Current knowledge level is likely sufficient
Clerical	7.3	15.3	6.6	<< Extensive education and/or training may be required
Design	5.2	13.4	19.0	>> Current knowledge level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 68

**Focus Occupation:** Architectural and Engineering Managers (11-9041)

**Associated Occupation:** Industrial Engineering Technicians (17-3026)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Monitoring	9.9	15.5	11.9	<< Extensive development of skills in this area may be required
Complex Problem Solving	9.1	13.2	13.0	0 Current skill level may be sufficient
Mathematics	6.2	12.0	11.7	0 Current skill level may be sufficient
Systems Evaluation	6.4	12.0	10.7	< A higher skill level may be required
Systems Analysis	6.5	11.8	10.7	< A higher skill level may be required
Technology Design	2.6	8.5	3.3	<< Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 96			
Focus Occupation: Architectural and Engineering Managers (11-9041) Associated Occupation: Industrial Engineering Technicians (17-3026)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Near Vision	11.1	13.3	12.5	0	Current ability level may be sufficient
Number Facility	6.3	11.1	11.2	0	Current ability level may be sufficient
Selective Attention	8.7	11.0	8.4	<<	Extensive improvement in abilities may be required
Originality	7.6	10.7	10.5	0	Current ability level may be sufficient
Fluency of Ideas	7.6	10.4	10.1	0	Current ability level may be sufficient
Mathematical Reasoning	6.3	10.3	13.3	>>	Current ability level is likely more than sufficient
Visualization	7.5	10.3	10.1	0	Current ability level may be sufficient
Speed of Closure	5.9	8.1	5.2	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 73
<b>Focus Occupation: Architectural and Engineering Managers (11-9041)</b> <b>Associated Occupation: Industrial Engineering Technicians (17-3026)</b>		
Work Activities	Exclusivity of Activity	
Advise clients regarding engineering problems	67	
Communicate technical information	4	
Confer with engineering, technical or manufacturing personnel	25	
Develop safety regulations	74	
Evaluate engineering data	60	
Prepare technical reports or related documentation	22	
Read blueprints	10	
Read technical drawings	7	
Understand engineering data or reports	48	
Understand technical operating, service or repair manuals	6	
Use technical regulations for engineering problems	61	

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: 56

**Focus Occupation: Architectural and Engineering Managers (11-9041)**  
**Associated Occupation: Industrial Engineering Technicians (17-3026)**

Tools and Technologies	Exclusivity
Business function specific software	1
Computers	1
Content authoring and editing software	1
Data management and query software	1
Indicating and recording instruments	2
Industry specific software	1
Viewing and observing instruments and accessories	4

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.